OFFICIAL

PATENT
36856.598

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Norio TANIGUCHI	Art Unit: 2817
Serial No.: 10/043,140	
Filed: January 14, 2002	Examiner: B. Summons
Title: SURFACE ACOUSTIC WAVE FILTER DEVICE	

AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated April 13, 2004, please amend the above-identified application as follows:

☐ **Amendments to the Specification** begin on page of this paper.

☒ **Amendments to the Claims** are reflected in the listing of the claims which begins on page **2** of this paper.

☐ **Amendments to the Drawings** begin on page of this paper and include an attached replacement sheet.

☒ **Remarks/Arguments** begin on page **9** of this paper.

Please note, if a box is not checked, then no corresponding amendment is being made.

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To:	Examiner B. Summons	**From:**	Christopher A. Bennett
Fax:	703-872-9306	**Date:**	July 13, 2004
Phone:		**Pages:**	13
Re:	10/043,140 36856.598	**CC:**	

•Comments:

Examiner Summons,

Please find attached the following documents for the above-identified application:

- Amendment

Respectfully submitted,

Christopher A. Bennett
For
Keating & Bennett, LLP
(Reg. No.,46,710)

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): A ladder circuit type surface acoustic wave filter device comprising:

a piezoelectric substrate;

a plurality of parallel arm resonators and a plurality of series arm resonators provided on said piezoelectric substrate, the parallel arm resonators and the series arm resonators being defined by surface acoustic wave resonators; and

a plurality of inductors respectively connected in series to said plurality of parallel arm resonators; wherein

the parallel arm resonators include at least one first parallel arm resonator of said plurality of parallel arm resonators connected to one of an input end and an output end of the filter device, and a second parallel arm resonator of said plurality of parallel arm resonators connected to a junction between two series arm resonators of said plurality of series arm resonators; and

said at least one first parallel arm resonator and said second parallel arm resonator have a relationship represented by the following expression:

$Cp1 \times 2 < Cp2$

where Cp1 represents the capacitance of said at least one first parallel arm resonator, and Cp2 represents the capacitance of said second parallel arm resonator; and

a total equivalent inductance of all of the inductors of said plurality of inductors that are connected to said second parallel arm resonator is ~~substantially equal to or~~ less than a total equivalent inductance of all of the inductors of said plurality of inductors connected to each of said at least one first parallel arm resonator.